

Remarks

Preliminary Matters

Claims 1-10 are pending. No Claims have been added or cancelled. No additional fees are required. If determined otherwise, the Office is authorized to charge Deposit Account No. 07-1077 for the amount.

Claim Objections and Claim Rejections for § 112

Applicant's amendments to the Claims track the suggestions made by the Examiner. Applicant has amended Claim 1 to recite that conventional additives (D) are different than plasticizer (C) or surface modifier (E), relying on the listing of conventional additives in the specification at page 4, line 30 -- page 5, line 2, which list has also been added to Claim 2. Applicant has also amended Claim 1 to address "waxlike" by referring to a "wax layer", as supported by the specification at page 3, line 16.

§ 103 Rejections

Applicant traverses the rejection of Claims 1-10 applying either U.S. Pat. No. 5,843,577 (Ouhadi et al.) or U.S. Pat. No. 5,856,399 (Itoh et al.).

The Office cites Ouhadi et al. as teaching improved surface properties, but the applicable passage of Ouhadi et al. is Col. 5, lines 62 et seq. where Ouhadi et al. explain that it is the presence of a copolymer of functionalized polyolefin and polyamide that improves the surface properties of the compound. Therefore, Ouhadi et al. at Col. 5, lines 45-60 does not reveal any particular surface modifier that "...migrates uniformly onto a surface and forms a wax layer." as required by Applicants' Claim 1.

The Office cites Itoh et al. as teaching improved surface properties but the text (Col. 6, lines 15-48) concerns softening of the rubber components. Therefore, Itoh et al. does not reveal any particular surface modifier that "...migrates uniformly onto a surface and forms a wax layer." as required by Applicants' Claim 1.

Applicant provides specific comparative evidence that the use of a surface modifier, such as hydrogenated castor oil, in addition to a conventional, commercial formulation of thermoplastic (A), rubber (B), plasticizer (C), and conventional

additives (D) reduces the adhesive friction value and the sliding friction value when tested according to DIN 53375. Please seek the Examples beginning at Page 4, line 20 of the specification.

Nothing of Ouhadi et al. or Itoh et al. suggests to one of ordinary skill in the art to add a surface modifier that "...migrates uniformly onto a surface and forms a wax layer." as required by Applicants' Claim 1. Moreover, dependent Claims 3 and 4 specify the types of surface modifier not disclosed or suggested by either cited reference. Therefore, Claims 1-10 are patentable over both references.

Double Patenting

The Office has rejected Claims 1-10 applying Obviousness-Type Double Patenting using Claims 1-17 of U.S. Pat. No. 6,774,162 (Vortkort et al.). The Office asserts that the plasticizer claimed in Patent '162 overlaps in scope with the surface modifier of the claims of this application. Applicants traverse this rejection.

A review of the elements of the combinations of Claims 1-17 of Patent '162 shows that Patent '162 requires "a substantially non-cross-linked polyethylene (B)"¹ that Claims 1-10 of this application do NOT require. Conversely, Claims 1-10 of this application require a surface modifier (E), which migrates uniformly onto a surface and forms a wax layer that Claims 1-17 of Patent '162 do NOT require. It is recognized by Applicants that both sets of claims require a thermoplastic, a partially crosslinked rubber, plasticizer, and conventional additives (aka blend ingredients), but *nothing* in the claims of Patent '162 requires an ingredient that generates a wax layer at the surface of the thermoplastic vulcanizate **AND** *nothing* in the claims of this application requires a substantially non-crosslinked polyethylene. Stated another way, there are five ingredients claimed in each combination: four are the same; the fifth of each is mutually exclusive of the other.

The Office has not asserted that there is anything obvious to move from a "substantially non-crosslinked polyethylene" to a "surface modifier that migrates uniformly onto a surface and forms a wax layer." Therefore, there is no obviousness

¹ It has been noted during the preparation of these Remarks that there is an error in the printing of Claim 1 of Patent '162. The prefix "non-" is missing in "cross-linked". A Request for Correction will be submitted in due course.

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of Claims 1-10 of this application resident in Claims 1-17 of Patent '162. The respective sets of claims are patentably distinct of each other.

Supplemental Information Disclosure Statement

Assignee of Applicant Vortkort² submits by paper mail a supplemental information disclosure to identify co-pending patent applications originally filed as provisional patent applications and then filed via the Patent Cooperation Treaty.

Conclusion

Applicants request a Notice of Allowance for Claims 1-10.

If there are any matters that prevent a Notice of Allowance, the Examiner is invited to contact the undersigned by telephone.

Respectfully submitted by:

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Date

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² An assignment from inventor Wallach has not yet been obtained and recorded.